What is claimed is:

1. A medical device for removing a foreign object from a body lumen, comprising:

an elongated member having a proximal section and a distal section;

a support frame attached to the distal section of the elongated member; and

a filter basket having a plurality of filter struts for capturing the foreign object, said plurality of filter struts including a proximal set of filter struts configured to attach the filter basket to a portion of the support frame, and a distal set of filter struts configured to couple the filter basket to the distal section of the elongated member.

2. The medical device of claim 1, wherein the filter basket and support frame are configured to self-expand from a collapsed position to an expanded position when deployed in the body lumen.

3. The medical device of claim 1, wherein said elongated member is a pusher wire.

4. The medical device of claim 1, wherein said support frame includes a proximal hoop and at least one rail member.

5. The medical device of claim 4, wherein said at least one rail member includes a left rail member and a right rail member.

6. The medical device of claim 5, wherein said left and right rail members are arcuately shaped.

7. The medical device of claim 4, wherein the distal set of filter struts and at least one rail member are attached to a bushing slidably disposed about the elongated member.

8. The medical device of claim 1, wherein the support frame includes a superelastic alloy.

9. The medical device of claim 1, wherein the proximal section of the filter basket has a generally open configuration.

10. The medical device of claim 1, wherein the distal section of the filter basket has a generally closed configuration.

11. The medical device of claim 1, wherein the filter basket includes a superelastic alloy.

12. The medical device of claim 1, wherein said proximal set of struts includes four proximal struts.

13. The medical device of claim 1, wherein said proximal set of struts includes two proximal struts.

14. The medical device of claim 1, wherein the support frame and filter basket are each formed of a flat sheet or tubular member.

15. The medical device of claim 14, wherein the support frame and filter basket are formed by a laser cutting or etching process.

16. The medical device of claim 1, wherein the filter basket is formed from a single workpiece.

17. The medical device of claim 1, wherein the support frame and filter basket are each formed of wire or ribbon.

18. The medical device of claim 17, wherein the wire or ribbon forming the filter basket has a smaller transverse cross-sectional area than the wire or ribbon forming the support frame.

19. The medical device of claim 1, wherein at least one of said plurality of filter struts has an undulating shape.

20. The medical device of claim 1, further including a polymeric web covering coupled to the filter basket.

21. A medical device for removing a foreign object from a body lumen, comprising:

an elongated member having a proximal section and a distal section;

a support frame attached to the distal section of the elongated member, said support frame including a proximal hoop and a plurality of rail members; and

a filter basket operatively coupled to the support frame and having a plurality of filter struts for capturing the foreign object, said plurality of filter struts including a proximal set of filter struts configured to attach a proximal section of the filter basket to said at least one rail member, and a distal set of filter struts configured to attach a distal section of the filter basket to a bushing slidably disposed about the distal section of the elongated member.

22. The medical device of claim 21, wherein the filter basket and support frame are configured to self-expand from a collapsed position to an expanded position when deployed in the body lumen.

23. The medical device of claim 21, wherein said elongated member is a pusher wire.

24. The medical device of claim 21, wherein each of said plurality of rail members is arcuately shaped.

25. The medical device of claim 21, wherein the support frame includes a superelastic alloy.

26. The medical device of claim 21, wherein the proximal section of the filter basket has a generally open configuration.

27. The medical device of claim 21, wherein the distal section of the filter basket has a generally closed configuration.

28. The medical device of claim 21, wherein the filter basket includes a superelastic alloy.

29. The medical device of claim 21, wherein said proximal set of struts includes four proximal struts.

30. The medical device of claim 21, wherein said proximal set of struts includes two proximal struts.

31. The medical device of claim 21, wherein the support frame and filter basket are each formed of a flat sheet or tubular member.

32. The medical device of claim 31, wherein the support frame and filter basket are formed by a laser cutting or etching process.

33. The medical device of claim 21, wherein the filter basket is formed from a single workpiece.

34. The medical device of claim 21, wherein the support frame and filter basket are each formed of wire or ribbon.

35. The medical device of claim 34, wherein the wire or ribbon forming the filter basket has a smaller transverse cross-sectional area than the wire or ribbon forming the support frame.

36. The medical device of claim 21, wherein at least one of said plurality of filter struts has an undulating shape.

37. The medical device of claim 21, further including a polymeric web covering coupled to the filter basket.

38. A medical device for removing a foreign object from a body lumen, comprising:

an elongated member having a proximal section and a distal section; and

a filter basket operatively coupled to the distal section of the elongated member, said filter basket including a plurality of interconnected filter struts forming a number of basket cells for capturing the foreign object.

39. The medical device of claim 38, wherein the filter basket is configured to self-expand from a collapsed position to an expanded position when deployed in the body lumen.

40. The medical device of claim 38, wherein said elongated member is a pusher wire.

41. The medical device of claim 38, wherein the filter basket includes a proximal section, a distal section, and an inner lumen.

42. The medical device of claim 41, wherein the proximal section of the filter basket has a generally open configuration.

43. The medical device of claim 41, wherein the distal section of the filter basket has a generally closed configuration.

44. The medical device of claim 41, wherein selective filter struts forming the distal section of the filter basket are reduced in thickness.

45. The medical device of claim 38, wherein the basket cells are configured to displace in multiple directions.

46. The medical device of claim 38, wherein said plurality of interconnected filter struts are formed from a single workpiece.

47. The medical device of claim 38, wherein the filter basket includes a superelastic alloy.

48. The medical device of claim 38, further including a polymeric web covering coupled to the filter basket.

49. A medical device for removing a foreign object from a body lumen, comprising:

an elongated member having a proximal section and a distal section; and

a filter basket operatively coupled to the distal section of the elongated member, said filter basket including a plurality of interconnected filter struts forming a proximal section and a distal section, wherein selective filter struts forming the distal section of said filter basket are reduced in dimension.

50. The medical device of claim 49, further including a proximal hoop coupled to the filter basket.

51. The medical device of claim 49, further including a radiopaque marker on at least one of said plurality of interconnected filter struts.

52. A method of forming an embolectomy device having variable wall thickness, comprising the steps of:

providing a workpiece of uniform thickness;

machining the workpiece to form a filter basket having a plurality of filter struts; and

selectively reducing the thickness of at least one of said plurality of filter struts to impart a desired characteristic to the embolectomy device.

53. The method of claim 52, wherein said machining step is performed by a laser machining process.

54. The method of claim 52, wherein said machining step is performed by an etching process.

55. The method of claim 52, wherein said reducing step comprises the steps of:

masking the filter struts forming the proximal section of the filter basket; and

removing a portion of the unmasked filter struts on the distal section of the filter basket.

56. The method of claim 55, wherein the step of removing a portion of the unmasked filter struts includes microblasting the filter struts.

57. The method of claim 55, wherein the step of removing a portion of the unmasked filter struts includes electropolishing the filter struts.